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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,187	07/22/2003	John C. Subelka	LDC-791 3DIV	6852

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07/27/2005

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EXAMINER

YOON, TAE H

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,187

Applicant(s)

SUBELKA ET AL

Examiner

Tae H. Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 17 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Cancellation of Case Nos. regarding US Application at top of page 1 is needed since said Case Nos. have no meaning. Also, updated information such as patent numbers for the previous applications is suggested.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 15 and 16 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 2 of prior U.S. Patent No. 6,696,507. This is a double patenting rejection.

Claims 1-19 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-19 of copending Application No. 10/452,392, 10/786,978 and 10/844,626. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 6-10, 17 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,353,040. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant restorative material inherently possesses the packability of said patent as evidenced by the instant claim 10.

Claims 17 and 19 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 5 is indefinite since it is unclear what reaction product applicant claims. Only active hydrogen will react with an isocyanate, so that the recited triethylene glycol dimethacrylates will not react with diisocyanate. Applicant has no particularly pointed out his reaction product of four separate monomers.

The recited values such as about 10 to about 30 in claim 9 are indefinite in not specifying a particular unit.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 8-12 and 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 475 239.

EP teaches photopolymerizable compositions comprising 20-90 weight percent of a filler which itself comprises metal oxide amorphous glass particles having 0.1 to 1

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micron size, mixed with pulverized glass having 0.5 to 5 micron size (abstract and example 1). Amorphous filler comprises 10 to 30 weight percent of the filler, whereas the glass filler comprises 30 to 70 weight percent of the filler, as shown at page 4, lines 43-50. Said example 1 teaches 51g of barium glass particles, 15g of fluoride-containing filler and 16g of AEROSIL OX 50 (fumed silica having a particle size of 0.04 micron (40 nm) at page 6, line 49 to col. 7, line 4). Also, said example 1 teaches the use of urethane-prepolymer, Bis-GMA and trimethylhexamethylene diisocyanate.

The method of claims 11 and 18 and the packaging of claim 12 are inherent practices in the EP. The cured composition taught in example 1 of EP inherently possesses improved wear properties and packability index. The recited "improved wear properties" has little probative value absent a particular value, and the intended use has no probative value also.

Thus, the instant invention lacks novelty.

Claims 1, 2, 4, 8, 10-12 and 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yearn et al (US 5,356,951).

Yearn et al teaches photopolymerizable compositions comprising 15-25 weight percent of a polymeric matrix and 75-85 weight percent of a filler comprising organic/inorganic composite filler, glass powder and fine particle filler in table 1. Particle sizes meeting the instant limitation are taught at col. 2, lines 30-40. metal oxide

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amorphous glass particles having 0.1 to 1 micron size, mixed with pulverized glass having 0.5 to 5 micron size (abstract and example 1).

The method of claims 11 and 18 and the packaging of claim 12 are inherent practices in the EP. The cured composition taught in example 1 of EP inherently possesses improved wear properties and packability index. The recited "improved wear properties" has little probative value absent a particular value, and the intended use has no probative value also.

Thus, the instant invention lacks novelty.

Claims 1-6, 8, 10-12 and 17-19 are rejected under 35 U.S.C. 103(a) as obvious over EP 0 475 239 in view of Blackwell (US 5,218,070) or Rheinberger et al (US 5,354,785).

The instant invention further recites acidic monomers having butane moiety and ethoxylated bisphenol-A-dimethacrylate over EP. Blackwell teaches such monomers having butane moiety and their use as a partial substitute for conventional resins in abstract and at col. 2, lines 47-50. Rheinberger et al teach various monomers including ethoxylated bisphenol-A-dimethacrylate for dental materials at col. 2, lines 63-64.

It would have been obvious to one skilled in the art at the time of invention to employ an acidic monomer having butane moiety of Blackwell et al or ethoxylated bisphenol-A-dimethacrylate of Rheinberger et al in the examples of EP since Blackwell teaches such monomers and their use as a partial substitute for conventional resins and since EP teaches the use of Bis-GMA absent showing otherwise.

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Claims 1-5, 8, 10-12 and 17-19 are rejected under 35 U.S.C. 103(a) as obvious Yearn et al (US 5,356,951) in view of Blackwell (US 5,218,070) or Rheinberger et al (US 5,354,785).

The instant invention further recites acidic monomers having butane moiety and ethoxylated bisphenol-A-dimethacrylate over Yearn et al. Blackwell teaches such monomers having butane moiety and their use as a partial substitute for conventional resins in abstract and at col. 2, lines 47-50. Rheinberger et al teach various monomers including ethoxylated bisphenol-A-dimethacrylate for dental materials at col. 2, lines 63-64.

It would have been obvious to one skilled in the art at the time of invention to employ an acidic monomer having butane moiety of Blackwell et al or ethoxylated bisphenol-A-dimethacrylate of Rheinberger et al in the examples of Yearn et al since Blackwell teaches such monomers and their use as a partial substitute for conventional resins and since Yearn et al teach the use of Bis-GMA absent showing otherwise.

Claims 1, 2, 4, 6, 8, 10-14 and 17-19 are rejected under 35 U.S.C. 103(a) as obvious over EP 0 475 239 in view of Chester et al (US 5,538,129).

The instant invention further recites a packaged unit dose material over EP. However, such packaging is known as taught by Chester et al, figures and col. 4, lines 1-18.

It would have been obvious to one skilled in the art at the time of invention to pack the dental composition of EP in the unit dose form of Chester et al since said unit

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dose would provide an easy access and use, and a long term stability of a stock due to use of the unit one at a time.

Claims 1, 2, 4, 8, 10-14 and 17-19 are rejected under 35 U.S.C. 103(a) as obvious over Yearn et al (US 5,356,951) in view of Chester et al (US 5,538,129).

The instant invention further recites a packaged unit dose material over Yearn et al. However, such packaging is known as taught by Chester et al, figures and col. 4, lines 1-18.

It would have been obvious to one skilled in the art at the time of invention to pack the dental composition of Yearn et al in the unit dose form of Chester et al since said unit dose would provide an easy access and use, and a long term stability of a stock due to use of the unit one at a time.

Claims 1, 2, 4, 6-12 and 17-19 are rejected under 35 U.S.C. 103(a) as obvious over EP 0 475 239 in view of Schaefer et al (US 5,750,590), Bowman et al (US 5,730,601), Lu et al (US 5,338,773) or EP 0 049 559.

The instant invention further recites metal boro- and fluoro-silicate glasses over EP'239. However, such fillers are well known as taught by Schaefer et al (col. 7, line 17), Bowman et al (col. 4, line44), Lu et al (col. 20, line 17) and EP'559(abstract).

It would have been obvious to one skilled in the art at the time of invention to employ various glass fillers of Schaefer et al, Bowman et al, Lu et al or EP'559 in


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EP'239 since the use of various glass fillers in dental compositions is a routine practice in the art and since EP'239 teaches glass fillers absent showing otherwise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tae H Yoon
Primary Examiner
Art Unit 1714

THY/July 25, 2005